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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,096	11/22/2000	Ernest G. Hope	D40182	4236

52323 7590 02/09/2006

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EXAMINER

YAEN, CHRISTOPHER H

ART UNIT	PAPER NUMBER
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1643

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/722,096		HOPE, ERNEST G.	
	Examiner		Art Unit	
	Christopher H. Yaen		1643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 101-172 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1 and 101-172 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

RE: HOPE, ERNEST G

1. Upon further review and reconsideration of the newly submitted claims 101-172, the species requirement mailed 10/20/2005 is vacated in favor of the new restriction requirement set forth herein.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claim 1, drawn to a composition of CTL wherein there is a subpopulation of lymphocytes that express one or more members of cell surface receptor family which binds a HSP 47, classified in class 435, subclass 344.1.
 - II. Claims 101-141, drawn to a composition comprising ex vivo expanded population of CTL identified as having the ability to kill tumor vasculature, classified in class 435, subclass 335.
 - III. Claim 142, drawn to a composition comprising a population of ex vivo expanded CTL that have anti-angiogenic activity, classified in class 435, subclass 343.
 - IV. Claim 143, drawn to a composition comprising a population of ex vivo expanded CTL that are able to kill freshly confluent HUVEC in a non MHC-I restricted manner, classified in class 435, subclass 336.

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- V. Claim 144, drawn to a composition comprising a population of ex vivo expanded CTLs that do not cause vascular leak syndrome and have the ability to kill neo-vascular cells, classified in class 435, subclass 343.1.
 - VI. Claim 145, drawn to a composition comprising a population of ex vivo expanded non-MHC class I restricted CTLs that have the ability to kill neo-vascular cells and do not express T-cell receptors, classified in class 435, subclass 343.2.
 - VII. Claim 146-151, drawn to a composition comprising a population of CTL expanded in a bioreactor, classified in class 435, subclass 344
 - VIII. Claims 152-157, drawn to a composition comprising a population CTLs expanded in the absence of tumor or vascular antigens, wherein the CTLs can selectively damage vascular cells, classified in class 435, subclass 334.
 - IX. Claims 158-169, drawn to a composition comprising a population of ex vivo expanded CTLs prepared by ex vivo expanding peripheral blood lymphocytes in a closed system and determining the cells which can kill neo-vasculature, classified in class 435, subclass 343.1.
 - X. Claims 170-172, drawn to a composition comprising a population of ex vivo expanded CTL that having the ability to kill tumor-associated vasculature and does not produce vascular leak syndrome in a human, classified in class 435, subclass 325.
3. The inventions are distinct, each from the other because of the following reasons:

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4. Inventions I-IX and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions differ one from the other because the different ex vivo expanded cells are made by what appears to be different processes. As such, the process of making the cells would produce a materially different product (i.e. cells that may have the same function, but have structurally distinct and different proteins expressed either on the surface or intracellularly). Furthermore, the products made and the distinct characteristics of each composition require separate and distinct searches. The inventions of Groups I-X have a separate status in the art as shown by their different classifications. As such, it would be burdensome to search the inventions of Groups I-X together.
5. Because these inventions are distinct for the reasons given above and the search required for Group I-X would not be co-extensive or overlapping because each characteristics (i.e. its ability to kill cells in a non-MHC-I restricted manner or bind to members of the receptor family that recognize HSP 47) is not required for each other, restriction for examination purposes as indicated is proper.
6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H. Yaen whose telephone number is 571-272-0838. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms, Ph.D. can be reached on 571-272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Yaen, Examiner
Art Unit 1643
February 6, 2006


CHRISTOPHER YAEN
PATENT EXAMINER